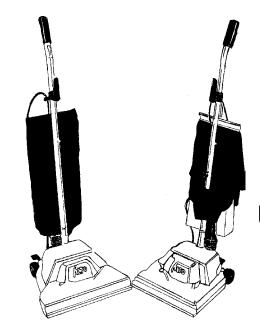




Operating Instructions and Repair Parts List



S12, S16 S12cc Upright Vacuum

READ THIS BOOK

This book has important information for the use and safe operation of this machine. Failure to read this book prior to operating or attempting any service or maintenance procedure to your ALTO machine could result in injury to you or to other personnel; damage to the machine or to other property could occur as well. You must have training in the operation of this machine before using it. If your operator(s) cannot read this manual, have it explained fully before attempting to operate this machine.

All directions given in this book are as seen from the operator's position at the rear of the machine.

For new books write to: ALTO U.S. Inc., 2100 Highway 265, Springdale, Arkansas 72764.

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OPERATOR SAFETY INSTRUCTIONS

WARNING

A AVERTISSEMENT

ADVERTENCIA

For the safe operation of this machine, read and understand all dangers, warnings and cautions. Look for these symbols:

DANGER: If you do not follow the instructions in a **DANGER**, severe bodily injury or death can occur to

the operator and/or other personnel.

WARNING: If you do not follow the instructions in a WARNING, injury can occur to you or to other

personnel.

CAUTION: If you do not follow the instructions in a **CAUTION**, damage can occur to the machine.

A WARNING: To reduce the risk of fire, electric shock, or injury:

- 1. You must have training in the operation of this machine before using it. READ THE INSTRUCTION BOOK.
- 2. Do not use outdoors or on wet surfaces.
- 3. Do not leave vacuum cleaner unattended when plugged in. Turn off the switch and unplug the electrical cord when not in use and before servicing.
- 4. Do not allow to be used as a toy. Close attention is necessary when used by or near children.
- 5. Use only as described in this manual. Use only manufacturer's recommended attachments.
- 6. Do not use with damaged cord or plug. If vacuum cleaner is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to a service center.
- 7. Do not pull or carry by cord, use cord as a handle, close a door on cord, or pull a cord around sharp edges or corners. Do not run vacuum cleaner over cord. Keep cord away from heated surfaces.
- 8. Connect to a properly grounded outlet only (refer to Grounding Instructions).
- 9. Do not use extension cords or outlets with inadequate current carrying capacity.
- 10. Turn off all controls before unplugging.
- 11. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- 12. Do not handle plug or vacuum cleaner with wet hands.
- 13. Do not put any objects into openings. Do not use with any opening blocked, keep free of dust, lint, hair, and anything that may reduce airflow.
- 14. This vacuum cleaner creates suction and contains a revolving brush. Keep hair, loose clothing, fingers and all parts of body away from openings and moving parts.
- 15. Do not pick up anything that is burning or smoking, such as cigarettes, matches or hot ashes.

WARNING: To reduce the risk of fire, electric shock, or injury:

- 16. Belt pulleys can become hot during normal use. To prevent burns, avoid touching the belt pulley when servicing the drive belt.
- 17. Do not use to pick up flammable or combustible liquids such as gasoline, or use in areas where they may be present.

SAVE THESE INSTRUCTIONS

GROUNDING INSTRUCTIONS

Preparation:

The following are instructions for connection to the power supply and the electrical ground.

This machine must be connected to the electrical ground to protect the operator from electrical shock. The machine has an approved power cord with three conductors and a plug with three terminals. Connect the plug to a receptacle that has three holes and is connected to the electrical ground. The green (or green and yellow) conductor in the cord is the ground wire. Never connect this wire to any terminal other than the ground pin terminal.



A DANGER: Improper connection of

the equipment-grounding conductor can result in risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance. If it will not fit the outlet, have a proper outlet installed by a qualified electrician.

This machine is for use on a 110 to 120 Volt AC 60 cycle electric circuit. Make sure you have the correct frequency and voltage before connecting the power cord to an outlet. The machine has a plug as shown in figure A. If a receptacle connected to the electrical ground as shown in figure A is not available, use an adapter as shown in figure C. This adapter must be connected as shown in figure B to an electrical ground in the electrical outlet. Make sure you use the plate screw and the tab to fasten the adapter.



MARNING: Always use this machine with an AC three-conductor electrical system connected to the electrical ground. Replace any worn, cut or damaged cords. Replace any damaged plugs, receptacles or connector bodies.



WARNING: Do not cut, remove, or break the ground terminal. Do not try to fit a three-terminal plug into a receptacle or connector body that does not fit the plug, see your Authorized ALTO Dealer to get an authorized person to make the connection.



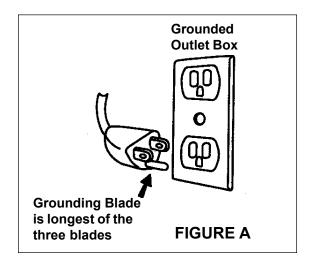
WARNING: Do not move the machine over an electrical cord. Always lift the cord over the machine.

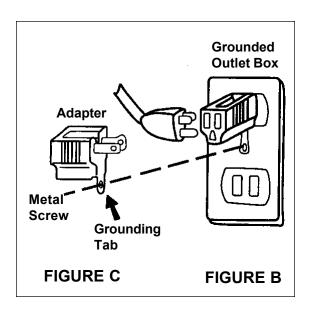
EXTENSION CORDS:

Use only an approved extension cord with three conductors. a plug with three terminals and a connector body with three holes. This machine has a power cord with wire size 18 AWG (AWG means American Wire Gauge).



WARNING: If you use an extension cord, use an extension cord with minimum wire size 16 AWG. Do not use an extension cord longer than 50 feet. Do not join two extension cords.





CONSIGNES DE SÉCURITÈ DE L'UTILISATEUR **A** AVERTISSEMENT

Pour utiliser cet appareil en toute sécurité, il faut lire et coprendre tous les consignes de danger, d'avertissement et d'attention. Soyez attentif aux symboles que voici.

DANGER: Ne pas respecter les consignes d'un avis de DANGER, peut occasionner la mort ou des

lesions corporelles graves pour l'utilisateur et/ou d'autres pesonnes.

AVERTISSEMENT: Ne pas respecter les consignes d'un AVERTISSEMENT peut occasionner des lesions

corporelles pour l'utilisateur et/ou d'autres personnes.

ATTENTION:

Ne pas respecter les consignes d'un avis d'ATTENTION peut occasionner des dommage

à l'appareil.

AVERTISSEMENT: Pour réduire le risque de feu, de choc électrique, ou de blessure:

- 1. Vous devez recevoir une formation appropriée avant de vous servir de cet appareil. LISEZ LE MANUEL DE CONSIGNES DU FABRICANT.
- 2. Ne pas utiliser à l'extérieur ou sur des surfaces mouillées.
- 3. Ne laissez pas l'aspirateur seul guand il est branché. Fermez le commutateur et débranchez l'appareil lorsque vous ne l'utilisez pas ou avant le nettoyage ou l'entretien.
- 4. Ne permettez pas que l'aspirateur soit utilisé comme un jouet. Une attention particulière est nécessarie lorsqu'il est utilisé par ou près d'un enfant.
- 5. Suivez strictement les recommandations d'utilisation de ce manuel. Utilisez uniquement les accessoires recommandés par le fabriquant.
- 6. N'utilisez jamais l'aspirateur si le cordon ou la fiche sont endommagés. Si l'aspirateur ne foncitionne pas comme il le devrait, s'il a été échappé, s'il est endommagé, s'il a été laissé à l'extérieur ou échappé dans l'eau, retournez-le à un centre de service avant de l'utiliser.
- 7. Ne tirez pas l'aspirateur ou le transportez par le cordon. N'utilisez pas le cordon en quise de poignée. Ne fermez pas uen porte sur le cordon ou tirez le cordon sur des bordures ou des coins pointus. Ne passez pas l'aspirateur sur le cordon. Tenez le cordon à distance des surfaces chauffantes.
- 8. Branchez toujours l'aspirateur dans une prise à trois (mise à terre).
- 9. N'utilisez pas des rallonges ou des prises qui n'ont pas une capacité suffisante pour transporter le courant.
- 10. Mettez sur arrêt tous les boutons de commande avant de débrancher.
- 11. Ne débranchez pas l'aspirateur en tirant sur le cordon. Pour débrancher, tenez la fiche et non pas le cordon.
- 12. Ne manipulez pas la fiche ou l'aspirateur avec les mains mouillées.
- 14. N'insérez rien dans les ouvertures. N'utilisez pas l'aspirateur si des ouvertures sont bloquées. Assurez-vous qu'elles soient dégagées de poussière, de mousse, de cheveux ou de tout autre chose qui pourrait réduire le passage de l'air.
- 15. Cet aspirateur crée de la succion et contient une rouleau-brosse tournant. Tenez les parties mobiles et les ouvertures loin des cheveux, du linge, des doigts et de toute partie du corps.

AVERTISSEMENT: Pour réduire le risque de feu, de choc électrique, ou de blessure:

- 16. Ne remassez pas de objets qui brûient ou fument comme les cigarettes, les allumettes ou les cendres chaudes.
- 17. Les poulies de la courroie peuvent devenir chaudes pendant l'utilisation normale. Pour prévenir des brûlures, évitez de toucher la poulie lors de l'entretien de la courroie.

CONSERVEZ CES INSTRUCTIONS

INSTRUCTIONS VISANT LA MISE A LA TERRE

PREPARATION:

Consignes pour brancher l'appareil a la source d'energie et pour la mise à la terre.

Cet appareil doit être mise à la terre afin d'eviter le risque de choc électrique. Cet appareil est pourvu d'un cordon muni de trois conducteurs et d'une fiche munie de trois bornes. Brancher la fiche à une prise qui a trois tous et est mise à la terre. Le conducteur vert (ou vert et jaune) dans le cordon est le fil neutre. Ne jamais attacher ce conducteur à une borne autre que la borne à terre.



A DANGER: Un conducteur de terre

mal raccordé peut entraîner un risque de choc électrique. Consulter un electricien ou un technicien qualifié si vous n'êtes pas certain que la prise est correctement mise à la terre. Ne pas modifier la fiche fournie avec l'appareil. Si elle ne peut être insérée dans la prise, faire installer une prise adéquate par un électricien qualifié.

Cet appareil est destiné à un circuit de 110 à 120 volts et 60 cycles. S'assurer que l'appareil est branché à une prise de courant ayant la même configuration que la fiche. Cet appareil est muni d'une fiche de mise à la terre semblable à celle illustrée par la Figure A.



AVERTISSEMENT: Toujours employer cet appareil avec un système électrique AC à trois conducteurs, raccordé à la mise à la terre. Remplacer tout cordon usé, coupé ou endommagé. Remplacer toute fiche ou prise endommagée.



AVERTISSEMENT: Ne pas couper, briser, ou enlever la prise de terre. Ne pas chercher à brancher la fiche à trois bornes, à une prise que ne lul correspond pas. Si la prise ne correspond pas à la fiche, contacter votre agent de vente autorisé des appareils Clarke Technology afin qu'une personne qualifiée effectue le branchement.



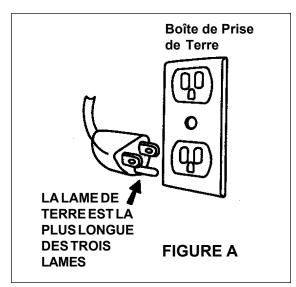
AVERTISSEMENT: Ne pas faire passer l'appareil sur le cordon électrique. Soulever toujours le cordon pour faire passer l'appareil en dessous.

LES RALLONGES:

Utilise seulement une rallonge approuvée à trois fils conducteurs, munie d'une fiche à trois bornes et d'une prise à trois trous. Cet appareil est muni d'un cordon électrique dont les fils sont de calibre 16 AWG (AWG signifie American Wire Gauge).



AVERTISSEMENT: Si vous utilisez une rallonge, celle-ci doit avoir un calibre de fil minimum de 16 AWG. Ne pas utiliser de rallonge qui dépasse 50 pieds (15 mètres) de long. Ne pas raccorder deux rallonges ensemble.



Note: Au Canada, l'utilisation d'un adaptateur temporaire n'est pas autorisée par le Code canadien de l'électricité.

HOW TO PREPARE THE MACHINE FOR OPERATION

Assemble the Handle

Attach upper (A) and lower (B) handle to handle socket (C) by aligning holes and securing with 2 part screws (D). See figure 1.

Install the Bag Assembly

Position the bag coupling into the left bag support (A) and turn the bag knob (B) counterclockwise to secure bag to base. Attach bag spring to bag hook (C) located on the rear of the top cord hook. See figure 2.

On the Collector Cup Model, the lower handle fits through the tube on the front of the collector cup frame.

HOW TO OPERATE THE MACHINE

With power cord plugged into the proper voltage outlet, lower handle to start the vacuum. Lower handle by depressing handle release pedal at the lower left rear of the vacuum. Depress pedal again and lower handle all the way to the floor to clean under low furniture.

To stop vacuum, raise handle to upright position.

For handle positions, see figure 3.

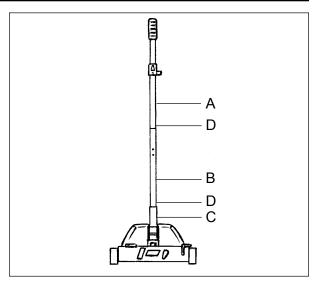


Figure 1

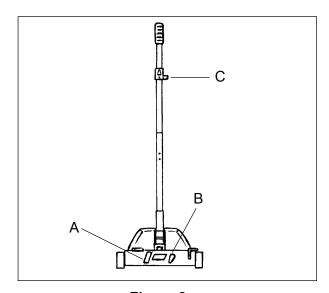


Figure 2

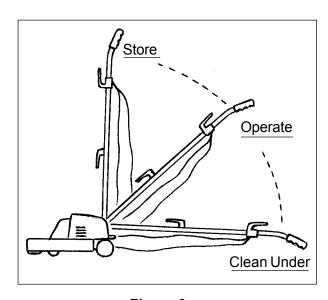


Figure 3

MAINTENANCE

This section describes the procedures that must be done by the operator.



WARNING: To prevent injury, always turn off the switch and remove the electrical plug from the electrical outlet before changing the brush, belt, or filter bag and before leaving the machine.



WARNING: To prevent electrical shock, always turn off the switch and remove the electrical plug from the electrical outlet before doing any repairs or maintenance to this machine.



WARNING: Belt pulleys can become hot during normal use. To prevent burns, do not touch the belt pulley when servicing the drive belt.



WARNING: Maintenance and repairs must be done by authorized personnel only.



This machine uses a round rubber belt to drive the brush. Check the belt frequently. Replace the belt if the belt slips on the brush. Remove hair and threads from the brush roll and the motor shaft pulley before replacing the belt.

How to Replace the Belt

To replace the drive belt, follow this procedure:

- 1. Make sure the electrical plug is removed from the outlet.
- 2. Put the machine upside down.
- 3. To remove the bottom plate, turn the two cam latches on the sides of the plate.
- 4. Remove the worn belt from the pulley on the motor shaft. See figure 4.
- 5. To remove the brush, pull the brush out of the slots in the frame.
- 6. Clean the vacuum opening in the base of the machine.
- 7. Check the bristles of the brush for wear. If the bristles are worn, see the section "What to Do about the Wear of the Brush."
- 8. Put a new belt around the pulley on the brush. Align the brush roll pulley with the belt guide. See figure 5.

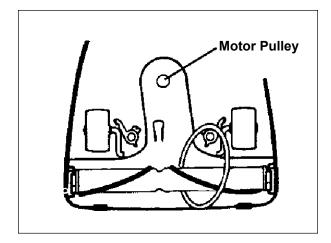


Figure 4

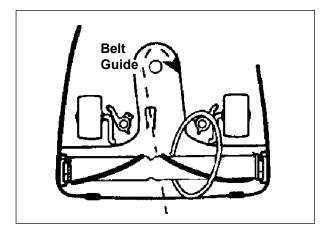


Figure 5

MAINTENANCE (CONT.)

- Place the rubber end cap covers over both end caps (flat side against end cap). Align holes and secure. Then, slant the brush roll forward so the end caps are in line with the slots in the cleaner base. Push the brush roll into the base until seated. See figure 6.
- Place the lower side of the belt into the belt guide and around the left side of the motor pulley. See figure 7.



CAUTION: Improper installation of the brush roll or brush roll belt could cause carpet or cleaner damage.

11. To install the chrome bottom plate, put the tab on the base in the slot in the plate. Press the center of the plate against the base of the machine. Turn the cam latches to fasten the plate to the base. See figure 8.

What to Do About the Wear of the Brush

- 1. Make sure the electrical plug is removed from the electrical outlet.
- 2. Put the machine upside down.
- 3. To remove the bottom plate, turn the two cam latches on the sides of the plate.

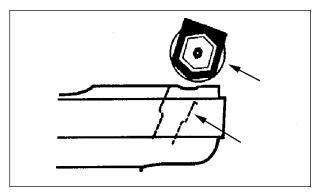


Figure 6

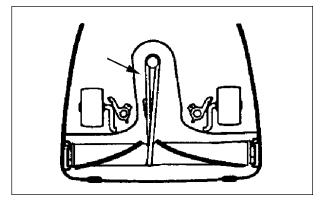


Figure 7

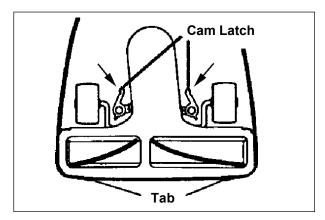


Figure 8

MAINTENANCE (CONT.)

Steel Core Brush



WARNING: Turn off the switch and disconnect unit from electrical supply before replacing brush strips.

- New brush strips inserts are supplied in sets. To replace, first disconnect the machine from the electrical outlet.
- Remove the brush roll, see the section "How to Replace the Belt."
- 3. Take the rubber end cab cover (figure 6, item A) from the end of the brush roll and unscrew the locknut (figure 9, item B).
- 4. Remove end cap (figure 9, item C) and bearing retainer (figure 9, item D).
- 5. Push the exposed end of the shaft (figure 9, item E) through the opposite end of the brush roll.
- Pull out the worn brush strip (figure 9, item F) with pliers and slide in a new one of the same length, inserting the rounded end first.
- 7. Fit the track on either side of the brush strip securely into the brush roll slot.
- Replace the second brush strip from the opposite end of the brush roll.
- 9. Return shaft (figure 9, item E) and align the indentation of the bearing retainer (figure 10, item D) with the brush strip on both ends. Seat firmly.
- 10. Position the end cap (figure 9, item C) with the flat side of the center hole over the flat side of the threaded shaft (figure 9, item E).
- 11. Tighten locknut (figure 9, item B).
- 12. Add the end cap cover (figure 9, item A) flat side down and secured over the four end cap projections.
- 13. When properly assembled, the brush roll should rotate freely between the two end caps.
- 14. Check the condition of the belt; change if necessary. Replace the roll belt bottom plate, see the section "How to Replace the Belt".

Lubrication

Do not oil the motor. The motor in this machine is permanently lubricated and sealed. Do not oil the motor at any time.

Electrical Maintenance



WARNING: Electric repairs and maintenance must be done by authorized personnel only. Return the machine to a Alto Authorized repair location.

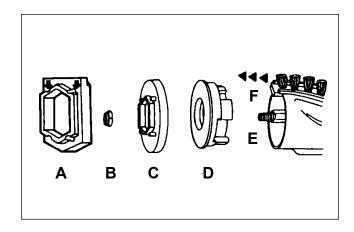


Figure 9

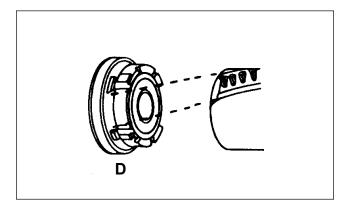
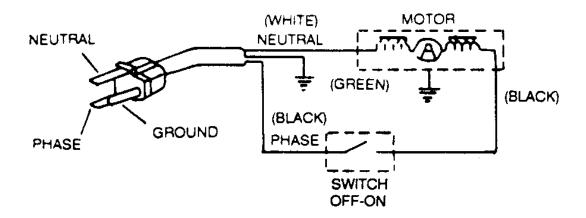


Figure 10

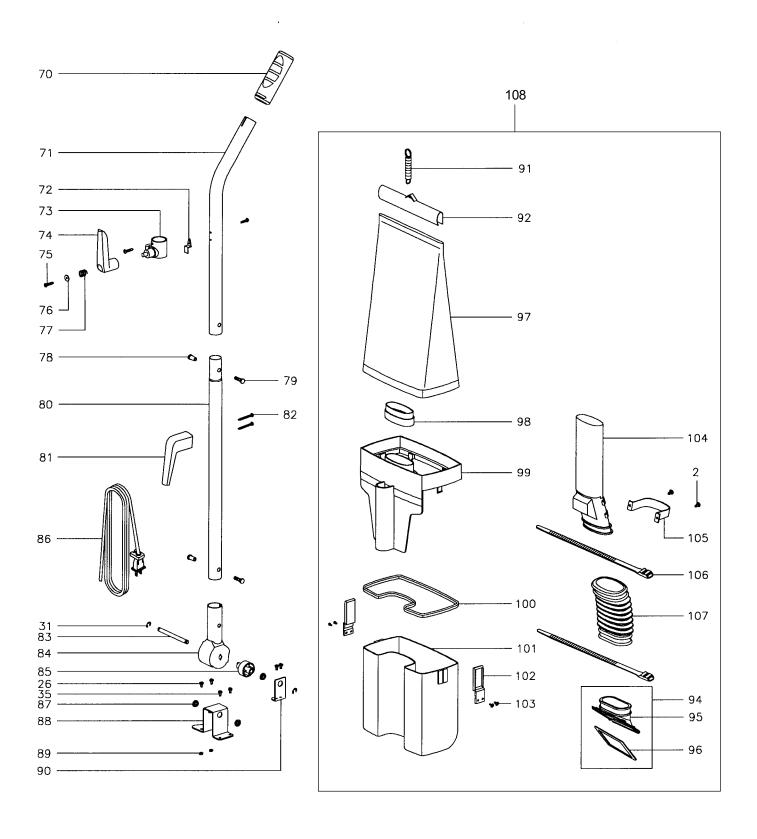
TROUBLE SHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	SOLUTION
Motor does not run.	1) Not firmly plugged in.	1) Check attachment plug.
	2) Bad On-Off switch.	2) Replace switch.
	3) Line open.	3) Replace cord.
	4) Motor open.	4) Check motor and wiring.
	5) Fan locked by material.	5) Remove obstruction.
Motor runs but cleaner	1) Belt broken.	1) Replace belt.
does not pick up.	2) Blocked air system.	2) Clean obstruction.
	3) Fan broken.	3) Replace fan.
	4) Worn brush roll.	4) Replace brush roll.
	5) Motor slow.	5) Check carbon brushes.
	6) Bag full.	6) Empty bag (or change paper bag).
Motor runs erratically.	1) Worn carbon brushes.	1) Replace brushes.
	2) Defective armature.	2) Check spark, replace armature.
	3) Bad electrical connection.	3) Check wiring.
	4) Defective On-Off switch.	4) Replace switch.
Brush roll vibrates.	1) Ball bearing worn out.	1) Replace brush roll.
	2) Ball bearing holder damaged.	2) Replace ball bearing holder.

CLARKETECHNOLOGY Symphony Upright Vacuum Wiring Diagram 11/00



CLARKETECHNOLOGY Symphony Upright Vacuum Collector Cup Assembly Drawing 7/01

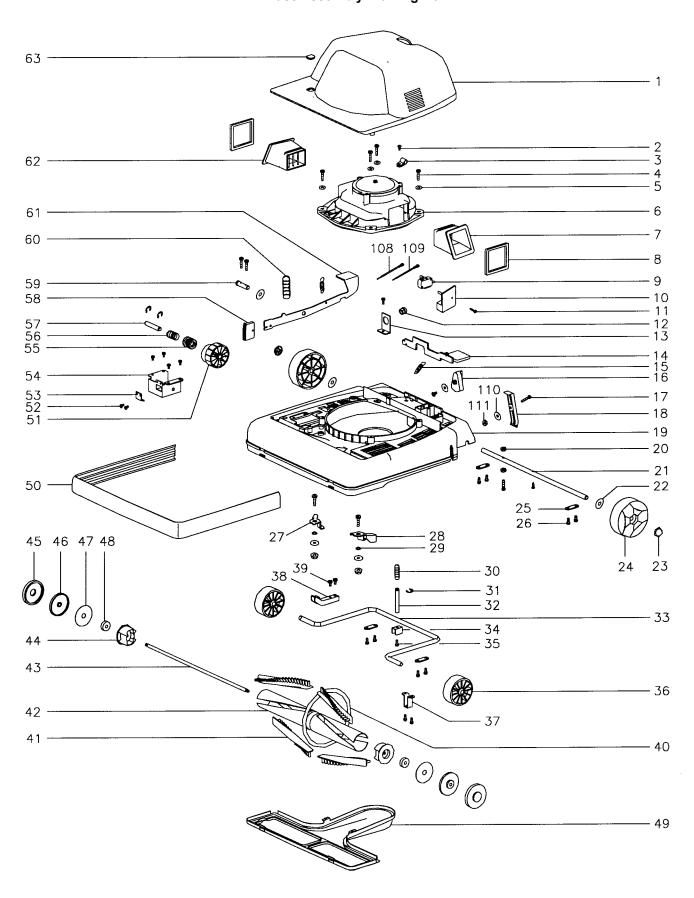


CLARKETECHNOLOGY Symphony Upright Vacuum Collector Cup Assembly Parts List 7/01

Ref.	Part No.	Description	Qty
2	80065A	Screw (M4 *10)	1
26	56489A	Screw (M4 *15)	23
31		E-clip (E6)	5
35	56485A	Screw (M4 * 8)	3
70	30138A	Handle Grip	1
71	51240A	Handle Assembly, Upper	1
72	30143A	Bag Hook	1
73	30144A	Bag Retainer	1
74	30142A	Cord Retainer, Upper	1
75		Screw (M4 *25)	3
76	80127A	Washer, Upper Cord Retainer	1
77	51278A	Spring, Upper Cord Retainer	2
78	80129A	Nut, Handle	2
79	80128A	Screw, Handle	2
80	51237A	Handle Assembly, Lower	1
81	30139A	Cord Retainer, Lower	1
82		Screw (M4 * 45)	2
83	51243A	Handle Socket Seat Axle	1
84	51241A	Handle Socket Tube	1
85	51244A	Handle Socket Cam	1
86	51357A	Power Cord	1
87	51242A	Bushing, Handle Socket	3
88	30156A	Seat, Handle Socket	1
89	51358A	Nut, Handle Tube	2
90	30154A	Clamp, Handle Socket Cam	1
91	51263A	Spring, Bag	1
92	51262A	Clip, Bag (Chrome)	1
95	30148A	Bag Coupling	1
96	30149A	Bag Coupling Gasket	1
97	51359A	Dust Bag	1
	51266A	Bag Frame (incl. w/bag asm.)	1
	51267A	Bag Clamp Plate (incl. w/bag asm.) lower	1
	51268A	Bag Clamp Plate (incl. w/bag asm.) upper	1
98	30145A	Seal, Upper Hose	1
99	30146A	Cup Frame	1
100	51360A	Gasket, Cup Frame	1
101	51265A	Dust Cup	1
102	51264A	Side Clip, Cup	2
103		Screw (M4 *9)	4
104	30147A	Exhaust Hose	1
105	51269A	Clamp	1
106	619221	Cable Tie	2
107	30150A	Hose, Inlet Curved	1
108	52362A◆	Collector Cup Assembly	1

NOTE: \spadesuit indicates a change has been made since the last publication of this manual.

CLARKETECHNOLOGY Symphony Upright Vacuum Base Assembly Drawing 1/01

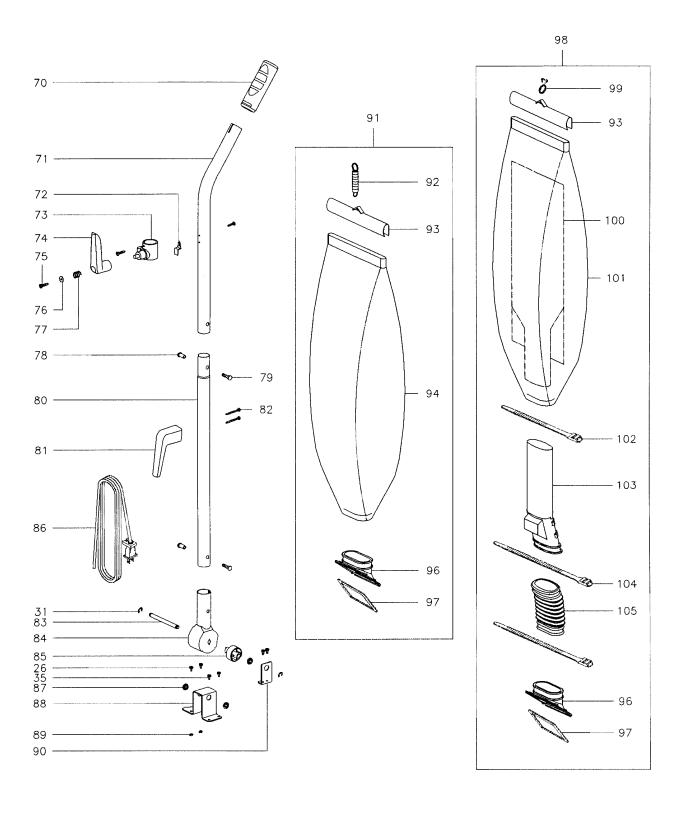


CLARKETECHNOLOGY Symphony Upright Vacuum Base Assembly Parts List 1/01

Ref.	Part No.	•	Qty.	Ref.	Part No.	Description	Qty.
1	51229A	Hood and Graphics	1	38	51261A	Clamp, Front Axle	1
2	80065A	Screw (M4 *10)	2	39		Screw (M3*10)	2
3	51949A	Cable Clip	1	40	903340	Drive Belt	1
4	80066A	Screw (M4* 18.5)	6	41	51253A	12" Bristle Strip Set (4 strips)	1
5		Washer (4.2 *12*1)	4		51255A	16" Bristle Strip Set (4 strips)	1
6	51348A	Motor Assembly	1	42		12" Brush Roll	1
7	51230A	Motor Exhaust (LH)	1			16" Brush Roll	1
8	30161A	Exhaust Foam	2	43	51251A	Shaft - 12"	1
9	40178A	Power Switch	1		51252A	Shaft - 16"	1
10	51245A	Switch Clip	1	44	51353A	Bearing Support	2
11		Screw (M3 *12)	2	45	30140A	Cover, Cap	2
12	30157A	Strain Relief Bushing	1	46	30141A	End Cap	2
13	30135A	Bushing Bracket	1	47	51354A	Washer, Felt	2
14	51256A	Foot Pedal	1	48	51250A	Bearing	2
15	51259A	Spring, Pedal Return	2	49	51227A	12" Bottom Plate Assembly	1
16	30152A	Knob, Bag	1		51228A	16" Bottom Plate Assembly	1
17	57951A	Screw (M4 *20)	4	50	30136A	12" Furniture Guard	1
18	30151A	Bag Support	1		30137A	16" Furniture Guard	1
19	30098A	12" Base Assembly	1	51	30158A	Height Adjustment Cam	1
	30099A	16" Base Assembly	1	52	80051A	Screw (M3*6)	2
20		Nut (M4)	2	53	51235A	Clip, Height Adjustment Cam	1
21	51270A	Rear Axle	1	54	30159A	Seat, Height Adjustment Cam	1
22		Washer (8.5*16*1)	3	55	51238A	Gear, Height Adjustment	1
23		Nut, Cap (F-Type)	2	56	51260A	Spring, Height Adjustment	1
24	30155A	Rear Wheel	2	57	51239A	Axle, Height Adjustment	1
25	51271A	Clamp, Wheel Axle	4	58	51234A	Crank Gear, Height Adjustment	1
26	56489A	Screw (M4 *15)	23	59	51236A	Crank Axle, Height Adjustment	1
27	51233A	Cam (RH)	1	60	51355A	Spring, Pedal Support	1
28	51231A	Cam (LH)	1	61	30160A	Crank, Height Adjustment	1
29		Washer (4.1*8*1)	2	62	51232A	Motor Exhaust (RH)	1
30	51257A	Spring, Front Axle	1	63	51356A	Height Indicator	1
31		E-Clip (E6)	5	108		Switch Wire -16#	1
32		Rod, Front Axle Support	1	109		Switch Wire -18#	1
33	51272A	Front Axle	1	110		Washer (4.2*14*1)	4
34	51351A	Front Axle Seat	1	111		Nut, Cap (M4)	3
35	56485A	Screw (M4*8)	3	NI*	51365A	Carbon Brush	2
36	30153A	Front Wheel	2	NI*	51366A	Impeller	1
37	51352A	Plate, Front Axle Support	1	NI*	51367A	Motor Pulley	1

*NI = Not illustrated

CLARKE TECHNOLOGY Symphony Upright Vacuum\ Handle and Filter Bag Assembly Drawing 7/01



CLARKETECHNOLOGY Symphony Upright Vacuum Handle and Filter Bag Assembly Parts List 7/01

Ref.	Part No.	Description	Qty.
26	56489A	Screw (M4*15)	23
31		E-Clip (E6)	5
35	56485A	Screw (M4*8)	3
70	30138A	Handle Grip	1
71	51240A	Handle Assembly - Upper Chrome	1
72	30143A	Bag Hook	1
73	30144A	Bag Retainer	1
74	30142A	Cord Retainer- Upper	1
75		Screw (M4*25)	3
76	80127A	Washer, Upper Cord Retainer	1
77	51258A	Spring, Upper Cord Retainer	1
78	80129A	Nut, Handle	2
79	80128A	Screw, Handle	2
80	51237A	Handle Assembly - Lower Chrome	1
81	30139A	Cord Retainer - Lower	1
82		Screw (M4*45)	2
83	51243A	Axle, Handle Socket Seat - Plated	1
84	51241A	Tube, Handle Socket - Plated	1
85	51244A	Cam, Handle Socket	1
86	51357A	Power Cord, Symphony	1
87	51242A	Bushing, Handle Socket	3
88	30156A	Seat, Handle Socket	1
89	51358A	Nut, Handle Tube (M4)	2
90	30154A	Clamp, Handle Socket Cam	1
91	52363A◆	Cloth Filter Bag Assembly	1
92	51263A	Spring, Bag	1
93	51262A	Clip, Bag (Chrome)	1
94	51248A	Dust Bag (long)	1
96	30148A	Bag Coupling	1
97	30149A	Gasket, Bag Coupling	1
98	10246A◆	Bag, Paper Filter Assembly	1
99			
100		Bag, Paper Filter 3 pk	1
101		Bag, Cloth, Zipper	1
102	52361A◆	Cable, Tie, Reuseable	1
103		Exhaust Hose	1
104	619221◆	0.000	2
105	30150A◆	Hose, Inlet	1

NOTE: ♦ indicates a change has been made since the last publication of this manual.

NOTES

ALTO® PRODUCT SUPPORT BRANCHES

U.S.A. Locations

HEAD OFFICE

ALTO U.S. Inc., St. Louis, Missouri 16253 Swingley Ridge Road, Suite 200 Chesterfield, Missouri 63017-1725

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ALTO U.S. Inc., Clearwater, Florida 33765 1500 N. Belcher Road

SERVICE FACILITIES

ALTO U.S. Inc., Carlstadt, New Jersey 07072 150 Commerce Road (201) 460-4774

ALTO U.S. Inc., Elk Grove, Illinois 60007 2280 Elmhurst Road (847) 956-7900

ALTO U.S. Inc., Denver, Colorado 80204 1955 West 13th Ave. (303) 623-4367

ALTO U.S. Inc., Houston, Texas 77040 7215 North Gessner Road

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ALTO U.S. Inc., Madison Heights, Michigan 48071-0158 29815 John R. (810) 544-6300

ALTO U.S. Inc., Marietta, Georgia 30062 1355 West Oak Common Lane (770) 973-5225

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AMERICAN SANDERS TECHNOLOGY
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Customer Service Headquarters and Factory

2100 Highway 265 Springdale, Arkansas 72764 (501) 750-1000

> Technical Service 1-800-356-7274

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CLARKE TECHNOLOGY U.S. WARRANTY

This Clarke Industrial/Commercial Product is warranted to be free from defects in materials and work-manship under normal use and service for a period of one year from the date of purchase, when operated and maintained in accordance with Clarke's Maintenance and Operations instructions.

This warranty is extended only to the original purchaser for use of the product. It does not cover normal wear parts such as electrical cable, rubber parts, hoses and motor brushes.

If difficulty develops with the product, you should:

- (a). Contact the nearest authorized Clarke repair location or contact the Clarke Service Operations Department, 2100 Highway 265, Springdale, Arkansas 72764, for the nearest authorized Clarke repair location. Only these locations are authorized to make repairs to the product under this warranty.
- (b). Return the product to the nearest Clarke repair location. Transportation charges to and from the repair location must be prepaid by the purchaser.
- (c). Clarke will repair the product and or replace any defective parts without charge within a reasonable time after receipt of the product.

Clarke's liability under this warranty is limited to repair of the product and/or replacement of parts and is given to purchaser in lieu of all other remedies, including INCIDENTAL AND CONSEQUENTIAL DAMAGES.

THERE ARE NO EXPRESS WARRANTIES OTHER THAN THOSE SPECIFIED HEREIN. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION OF THE FACE HEREOF. NO WARRANTIES, INCLUDING BUT NOT LIMITED TO WARRANTY OF MECHANTABILITY, SHALL BE IMPLIED. A warranty registration card is provided with your Clarke product. Return the card to assist Clarke in providing the performance you expect from your new floor machine.

ALTO U.S. Inc., 2100 Highway 265, Springdale, Arkansas 72764.

CLARKE TECHNOLOGY reserves the right to make changes or improvements to its machine without notice.

Always use genuine Clarke Parts for repair.

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